SEL-651 via Fiber, How to Establish Comms

This guide is intended to be a reference for both on-site Technicians and Stem Support Dept personnel.

This guide is specifically for SEL devices that need to communicate via Fiber lines, which is less common than a RS485 or TCP connection.

This setup requires hybrid addressing, so both networking info and serial info.

Step 1 - Determine the Port on the SEL device that is specifically for Fiber. For example, on a SEL-651, it is Port 5 that is used for Fiber connections. Please note that all addressing and configuration needs to be applied to this Fiber port when configuring the SEL device. Make sure the physical connections between the Fiber Port and the Local Network (typically a networking switch / ethernet switch) are secure and properly installed.

Step 2 - Apply networking info to the Fiber Port on the SEL device (see below for common example)Please note that the site's SLD document contains that site's LAN info, so reference that document if you are unsure of what the site's networking info is. Please note that the site's SLD document contains that site's Hardware schedule, which is where you will find the static LAN IP info for the device itself. *** Finally, and this is critical, you need to set the "**Modbus Master 1 IP Address**" which is the static LAN IP address of the *logger*, which is typically 192.168.13.151. ***

- example networking information for SEL-651 via Fiber Port
. gateway ip: 192.168.13.1
. dns (if requested): 192.168.13.1
. subnet: 255.255.255.0
. static lan ip of the device itself: 192.168.13.181
. Modbus Master 1 IP Address: 192.168.13.151

Step 3 - Apply the serial information to the Fiber Port on the SEL device (see below for common example)The default modbus address should be: 1. Also note that if you do not have a baud rate field, assume the baud rate is: 9600.

- example serial information for SEL-651 via Fiber Port
. modbus address: 1
. baud rate: 9600

Step 4 - Have Support Dept remotely log into the SCADA and make sure the device is ok in the SCADA.